HICKORY BLUFF AND THE ST. JONES RIVER LANDSCAPE

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INTRODUCTION

The St. Jones River drainage can be characterized as a combination of natural and cultural landscapes within which the occupants of the Hickory Bluff Site lived. The natural landscape, as traditionally viewed in archaeology (Knapp and Ashmore 1999), provided environmental parameters within which settlement was constant. The cultural landscape defined both social and spiritual parameters for occupation along the St. Jones and interaction with the supernatural. Perhaps the most obvious indicator of ritual activity is the presence of the Delmarva Adena manifestation at the St. Jones Adena Site south of Hickory Bluff.

THE NATURAL LANDSCAPE

The St. Jones River is a tidal tributary and flows in a generally southeasterly direction into the Delaware Bay. The St. Jones is approximately 16 miles long and the watershed drains 55,000 acres (DNREC 1997). Major arteries are northeasterly or east flowing streams. The physiographic character of the St. Jones margins contrasts rather sharply between the river's upper and lower reaches. In the vicinity of Dover, the St. Jones meanders within a well-defined valley. Bluff slopes are present where the channel has transgressed adjacent uplands. Freshwater wetlands occur on the inside of the numerous meander loops. The mouths of Puncheon Run and Isaac Branch are embayed, forming wide coves that extend inland from the main channel. Further downstream, the main channel is bordered by expansive brackish tidal wetlands. Wetland areas also exist along minor tributary streams that shallowly dissect the flanking uplands. In contrast to the Chesapeake Bay shore, where the mouths of even very minor drainages are broadly embayed, the St. Jones, the Murderkill, as well as other rivers in the area enter the Delaware Bay through a narrow channel. This configuration provides for a fairly dramatic tidal current along much of the lower reaches of these rivers.

Paleoenvironmental conditions along the St. Jones River were affected by the rise in sea level associated with the melting of the Pleistocene continental ice sheets (Custer 1989). From the late Pleistocene until about 3000 B.C., the rise in sea level was rapid, inundating the existing coastal plain. After 3000 B.C., the rise was less pronounced, and riverine and estuarine environments were established and stabilized, creating a predictable and abundant resource base.

The freshwater-brackish water transition zone of Middle Atlantic Coastal Plain rivers is widely recognized to have been a highly productive environment for aboriginal hunting and gathering peoples. In this zone, a wide range of resources co-occur, or can be found in close proximity. While the fresh-brackish transition of the St. Jones estuary comprises a rich and productive environment, the nearby upper and lower reaches of the river have a completely different physiographic character and ecological make up. Areas along the mouth of the St. Jones and the Delaware Bay shoreline,

situated just a few miles downstream, are characterized by expansive salt marshes. By contrast, prior to historic land clearing, areas west of present day Dover would have been covered in mixed deciduous forests drained by spring-fed low order steams. These divergent settings would have hosted distinctly different plant communities and game species populations. The proximity of three very different and productive environmental zones; 1) salt marsh/ bay shore, 2) freshwater-brackish tidal estuary and 3) interior forests/fresh water streams, would have provided seasonal diversity and subsistence stability for Native American groups in the area.

THE ST. JONES RIVER OCCUPATIONS

Over 210 prehistoric sites have been recorded in the St. Jones watershed (Delaware SHPO files). Observable site patterning is the result of a combination of variables including post-depositional processes, archaeological bias, and cultural selection. Forty sites in the St. Jones watershed were identified with temporally diagnostic artifacts (i.e., projectile points and ceramics) and/or radiocarbon dating. Very few Paleoindian (n=3) or Early Archaic (n=4) occupations have been recorded on the St. Jones. The three sites with possible Paleoindian artifacts (i.e., finely-flaked large projectile point fragments) occur on the upper reaches of the St. Jones drainage along Fork Branch and Isaac Branch. The four Early Archaic occupations are also situated on Fork Branch in the northern portion of the St. Jones drainage. Post-depositional processes and differential preservation are both contributors to the scarcity of these early period sites in this watershed. Paleoindian and Archaic floodplain sites on the lower Delaware River and major tributaries have, of course, been lost to rising sea levels after 3000 B.C.

Middle and Late Archaic occupations increase in number and cover a broader area of the St. Jones drainage. The Middle Archaic occupations occur on Fork Branch, the middle and lower reaches of the St. Jones, and above Tidbury Creek. The Late Archaic occupations also occur along the St. Jones, Fork Branch and on the coast; three sites are associated with smaller tributaries of Isaac Branch, Cahoon Branch, and Puncheon Run. Multi-component locations are few and include Blueberry Hill at the confluence of the St. Jones with the Maidstone (Heite and Blume 1995).

Early, Middle, and Late Woodland occupations illustrate the same broad patterns of site location as suggested in the Middle and Late Archaic; however, these occupations concentrate along the middle reaches of the St. Jones with only a few clusters on the confluence with Maidstone Branch and Fork Branch in the northern portion of the watershed. Repeated use of site locations throughout the Woodland Period increases, particularly along a 4-mile stretch on the central portion of the St. Jones.

Ten sites are located within 4 miles of each other and include Hickory Bluff, Puncheon Run, Island Farm, Carey Farm, the Air Base School Site, and the St. Jones Adena site. These sites are located on the bluffs above the St. Jones and the general area encompasses the confluence of the St. Jones with three tributaries: Puncheon Run, Isaac Branch, and Tidbury Creek. In the prehistoric period, this area represented an ecotone between two major resource zones: the estuary environment associated with the embayed confluences, and freshwater/riparian/upland forest zones along the St.

Jones and its tributaries. The accessibility of different resources areas (i.e., tidal estuary and upland forests) and the density of resources in the estuarine environment created a magnet for prehistoric populations (Binford 1980).

THE CULTURAL LANDSCAPE - SECULAR

The cultural landscape in the vicinity of the Hickory Bluff Site most likely included both secular and spiritual definitions. Aspects of the secular or social nature of the cultural landscape may have consisted of other sites/occupational areas which may or may not have been contemporaneous, and cultural boundaries determined by topographic features. Social parameters for site selection on the east side of the St. Jones may have included maximizing viewshed of the river and the adjacent tributaries (i.e., Puncheon Run, Isaac Branch and Tidbury Branch) for defensive purposes.

These sites represent continuity of occupation from the Early through the Late Woodland. Early Woodland ceramics (i.e., Marcey Creek, Seldon Island, Dames Quarter, Wolfe Neck, and Accokeek) occur in various combinations at nine of the ten sites (the exception being the St. Jones Adena site). Seldon Island ceramics were identified only at Island Farm and Accokeek ceramics occurred only at Carey Farm (Custer et al. 1995). Clay-tempered ceramics such as Coulbourn, Nassawango and Wilgus, were identified at Puncheon Run on the west side of the St. Jones (Liebknecht et al. 1997) and at the five sites on the east side of the river (Hickory Bluff, Island Farm, Carey Farm, 7K-D-26, and Air Base School). With the exception of site 7K-D-28, which contained only Hell Island sherds, the remaining eight sites were characterized by both Mockley and Hell Island ceramics, demonstrating continuity in Middle Woodland occupation. Late Woodland occupations, exemplified by the presence of Townsend, Killens, and Minguannan sherds, suggested a slightly different pattern with the majority of the sites containing Townsend ceramics. Minguannan sherds occurred on only four sites (Hickory Bluff, Island Farm, Carey Farm, and 7K-D-26) (Catts et al. 1995; Custer et al. 1995; Parsons ES 1999).

The occupations defined by the presence of Minguannan ceramics are clearly associated with the east side of the St. Jones. Only one other site in the St. Jones drainage (site 7K-C-312) contains Minguannan ceramics and it is also located on the east side of the St. Jones at Fork Branch. The number of sites in the St. Jones drainage with Minguannan occupations is extremely small (n=5) suggesting very limited and geographically restricted occupations in this portion of Delmarva. It is possible that the St. Jones River represented a territorial boundary between two populations, one that the Minguannan ceramic makers did not cross. Incidentally, the presence of Minguannan occupations along the eastern bluffs of the St. Jones may also have been based on the need of a wide viewshed, possibly associated with a defensive posture.

THE CULTURAL LANDSCAPE - SPIRITUAL

The cultural landscape in the central portion of the St. Jones River most likely contained spiritual

aspects of site location and ritual activity. Use of symbols in cosmology such as cardinal directions among other things, may have influenced cultural patterning. The most distinct manifestation of the spiritual landscape presently recognized in this area is the Delmarva Adena Complex.

The Delmarva Adena Complex is defined by the presence of elaborate and exotic grave goods associated with multiple burials from the Early Woodland Period. The mortuary sites in the Delmarva consist of the Killens Pond Site (7K-E-3), the Frederica Site (7K-F-2), the Sandy Hill Adena Site (18DO30), the Nassawango Adena Site (18WO23), and the St. Jones Site (7K-D-1) (Ford 1976; Custer 1989; Dent 1995). Non-mortuary habitation sites are identified by the presence of Adena notched points, usually made from high-quality chert from the Ohio River Valley, isolated exotic artifacts identical to those associated with mortuary locations, and clay-tempered ceramics, such as Coulbourn, Nassawango, and Wilgus (Custer 1989).

The St. Jones Adena site (7K-D-1) is located on the east side of the St. Jones River, north of the confluence with Cypress Branch. This site consisted of the remains of at least 50 individuals (both adults and sub-adults) in eight discrete locations, and represented dry bone cremations and secondary burials indicated by unburned disarticulated bone (Thomas 1976; Custer 1989). Associated grave goods included bifacial blades and stemmed points of local and non-local lithic materials, tubular pipes, copper and shell beads, stone and copper gorgets, drilled animal teeth, stone paint cups, faceted hematite, and mica (Thomas 1976; Custer 1989). Social status was inferred by the presence of substantially more artifacts associated with secondary burials whereas fewer artifacts were found with cremations. Age or gender did not necessarily define social status because both females and sub-adults were interred in secondary burials with numerous artifacts (Custer 1989).

Radiocarbon dating and artifact assemblages from the prehistoric sites north of the St. Jones Adena site suggest specific occupations during the Adena time frame. Radiocarbon dates from Hickory Bluff, Carey Farm, Island Farm, and the St. Jones Adena site bracket a series of probable Adena occupations (Table 1). The residue from three clay tempered ceramic sherds at Hickory Bluff have yielded radiocarbon dates of 1850+/- 60 years before present (BP), 1930+/-40 years BP, and 1980+/-40 years BP; all three dates securely within the Adena time frame. Two of the three radiocarbon dates from Carey Farm were associated with features containing both Coulbourn and Mockley ceramics. The quantities of Coulbourn and Mockley sherds from the two features was sufficient to identify individual vessels and indicated simultaneous use of two ceramic types (Custer et al. 1995: 129).

All of sites identified as possible camp locations on the east side of the St. Jones River exhibited clay-tempered ceramics. Coulbourn ceramics were present at all five sites (Hickory Bluff, Island Farm, Carey Farm, 7K-D-26, and Air Base School). Nassawango ceramics were identified at both Island Farm and Carey Farm (Custer et al. 1995). Preliminary analysis of the Puncheon Run artifact assemblage indicates the presence of Wilgus ceramics. Flint Ridge Chalcedony artifacts were recovered from several of these sites, including debitage at the Air Base School Site (Thomas and Payne 1996) and at Hickory Bluff (Liebknecht et al. 1997), and a Snyder's corner-notched point from the South Central Area at Carey Farm (Custer et al. 1995). Adena-like pebble points from

Hickory Bluff are most likely associated with this Adena occupation of the St. Jones River. The presence of the two broken incised slate gorgets at Hickory Bluff may also suggestive of the Adena manifestation although direct association with dated features has not yet been established.

Cultural landscapes associated with the use of mortuary sites in the lower Illinois River valley have been suggested (Buikstra and Charles 1999) and may represent both spiritual and social interaction. Locations of mortuary sites on bluff crests in the lower Illinois River valley are viewed as a spiritual landscape where the dead are placed at the intersection between earth (natural universe) and sky (spiritual universe), providing a vertical dimension metaphorically connecting the two worlds. These highly visible bluff top sites also may have served as markers of territorial ownership (Buikstra and Charles 1999:208).

Similar characteristics are associated with the St. Jones Adena Site, located on a terrace/bluff at the neck of a St. Jones oxbow bend. Unobstructed view (i.e., viewshed) from the site is approximately 205°, ranging from southeast to west to northwest. Some Woodland ossuaries in Maryland (including the Adena site, Sandy Hill) are situated in similar settings as the St. Jones Adena Site. These settings include location on the middle ranges of major drainages, use of prominent high spots and excellent visibility facing open water, which often occurs to the west (Curry 1999).

Other types of cultural landscapes may be based on horizontal symbolism, in a manner similar the directional shrines and levels of sacredness identified in the Southwest (Snead and Preucel 1999). Although site patterning currently recognized on the St. Jones may be biased by restricted coverage of archaeological investigations, the existing site locations indicate five distinct occupation areas along the east side of the river, north of the St. Jones Adena Site. General belief of Mid-Atlantic groups was that departed spirits traveled south or west (Weslager 1996; Roundtree 1989). Locating occupations north or east of burial locations may imply creating unobstructed paths for departing spirits. And in the case of this portion of the St. Jones, the north/south river course may reinforce that symbolism.

CONCLUSION

The Hickory Bluff Site represents a continuity of prehistoric occupation along the St. Jones River and will contribute to an understanding of both natural and cultural landscapes through time. This site indicates economic considerations characterized by the procurement and use of adjacent floral and faunal resources along the river. The secular domain is suggested by the presence and density of other sites along the bluffs and hints of possible territoriality and defensive strategies. The spiritual realm at Hickory Bluff may be reflected in the directional orientation of camp locations in relation to a mortuary center associated with the Delmarva Adena. The Hickory Bluff site contains a wealth of archaeological knowledge, that with continuing analyses, may provide a more comprehensive understanding of economic, social, and spiritual realms of prehistoric populations along the St. Jones.

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